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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,436	01/30/2001	Claudio De Girolamo	Q62839	9169

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2662

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,436

Applicant(s)

GIROLAMO ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 01/30/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/30/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 7 is objected to because of the following informalities:

In claim 7, it is suggested that applicant rewrite “the manager” on line 13 as “the network manager” for terminology consistency.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, it is not clearly stated what is meant by “should none of the nominal route spans be bounded by a node requesting the intervention of the protection mechanism to serve a failure or a user command resulting in a span re-routing, it further comprises the step of checking if at least one of the spans of the Nominal Route is bounded by a node requesting the intervention of the protection mechanism to serve a failure or a user command resulting in a ring re-routing”.

Claims 5 and 6 are rejected because they depend on claim 4.

Examiner will consider claims 4-6 with provided explanations made by Applicant.

Drawings

The drawings in Fig.3 is objected to because according to specification , page 6, lines 10-20, descriptions “NO” to block 20 should be “YES” and “YES” to block 22 should be “NO”.

“ a network manager” in claim 1 is not indicated in the drawing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 7-10 are rejected under 35 USC 102(e) as being unpatentable by Ando (Pat. 6,526,020 B1) in view of Chaudhuri (Pat. 6,324,162 B1).

In claims 1 and 7, Ando discloses a MS-SPRING network (Transoceanic system, Fig.8, col.1, lines 5-10) comprising: network elements or nodes (Fig.8, NE1-NE8, see col.1, lines 15-20), each node comprising a controller(CPU 10, Fig.9), and a memory (Memory 200, Fig.9). (See col.1, lines 32-40). A fiber optic spans (a ring, Fig.8) interposed between the network elements (N1-N8) to form a ring, each network element (Ni) being connected to adjacent network elements (N2-N8) through said fiber optic spans allowing a bidirectional communication therebetween (see col.1, lines 10-15). At least one path (R8, Fig.8) connecting two or more network elements of the ring (N1, N8, N7, N6, N5, N4, N3), the at least one path, in a network free-of-failure condition, following a corresponding at least one Path Nominal Route(see col.1, lines 15-20). The method comprising the steps of providing the network manager with information relating to the Nominal Route (Normal path information 200a, Fig.9)

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of the at least one path (see col.1, lines 40-48); and information of current status of the at least one network element so as to calculate the current route (route 10, Fig.10 or route 11, Fig.11) of the at least one path.(See col. 1, lines 43-65). Ando does not disclose a network manager that control protection mechanism.

Chaudhuri discloses a network manager (Fig.2, Restoration Path Computation System 20) that control protection mechanism (See col.3, lines 55-65 & col.4, lines 5-40). Therefore, it would have been obvious to one ordinary skill in the art to implement the RPCS 20 of Chaudhuri into the transoceanic ring network of Ando to protect traffic travelling in the network. The multivation is to keep undelivery traffic from being being routed to invalid destination by rerouting the traffic via protection spans.

In claims 2 and 8, Ando discloses identifying which paths of the at least one path are carried at a span (see col.2, lines 10-15).

In claims 9 and 10, Ando discloses a computer program code means adapted to run on a computer and a computer-readable medium having a program recorded thereon comprising computer program code means (See col.7, lines 35-40).

In claim 3, Ando discloses analyzing the Path Nominal Route of the at least one path See claim 1 above). Ando does not disclose verifying if at least one of the Nominal Route spans comprises a node requesting the intenrention of the protection mechanism to serve a failure or a user command resulting in a span re-routing and, in the affirmative, declaring that the current route coincides with the nominal route, where main spans are replaced by spare spans.

Chaudhuri discloses, in Fig.2, when a working channel 16 (main span) on link 14, fails, a localized restoration is seeked to restore traffic onto restoration chanel 18 (spare span) within the

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link connecting nodes 12A and 12D(main spans are replaced by spare spans). Nodes 12A checks for the availability of restoration channel 18 (verifying if at least one of the Nominal Route spans comprises a node (node 12A) requesting the intervention of the protection mechanism to serve a failure. See col. (See col.6, lines 7-45). Therefore, it would have been obvious to one ordinary skill in the art to apply the teaching of Chaudhuri into the Ando system to connect the two nodes via the spare span when the main span fails. The motivation is to prevent lost data when a failures occurs.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Abbas et al. (Pat. 6577594 B1) discloses Telecommunications System.

Ellinnas et al. (Pat. 6760302 B1) discloses Automatic protection Switching System in a Network.

Andersson et al. (Pat.6535481 B1) discloses Network Data Routing.Protection Cycles for Automatic Protection Switching.

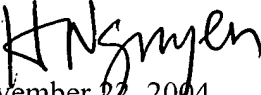
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen
Primary Examiner


November 22, 2004